

REMARKS

Claims 6, 7, 20, 22 and 24 - 28 are in this application and are presented for reconsideration. Claims 6 and 20 have been amended to highlight the combination of features which define over the prior art references.

The prior Office Action of July 8, 2004 indicated that claims 21 and 23 include allowable subject matter and would be allowable if rewritten in independent form. Thus, a previously submitted amendment dated November 18, 2004, amended claim 20 to include the features of claim 21 and added a new claim 28 which included the features of claims 20 and 23 to get the claims and their dependent claims allowable.

However, instead of issuing a Notice of Allowance, the Patent Office issued another Office Action on January 26, 2005. Therefore, to prevent any obfuscation, a telephone interview was held on May 18, 2005 discussing a facsimile transmitted proposed Amendment. Applicant thanks the Examiner for the courteous phone interview during which the Examiner agreed that the proposed Amendment defines over the currently outstanding prior art references, although a further search may be necessary. Thus, Applicant hereby submits, an Amendment incorporating the changes discussed during the phone interview held on May 18, 2005.

By this Amendment, the Applicant has amended several claims to overcome the Examiner's rejections and respectfully makes assertions for overcoming the rejections of the outstanding Office Action dated January 26, 2005 in the following paragraphs.

Claim Rejections - 35 U.S.C. §102

Claim 6 has been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. patent No. 4,151,579 to Stark (the "Stark '579" reference, hereinafter).

It is Applicant's position that the prior art as a whole including the Stark '579 reference neither teaches nor suggests the present invention as claimed. The Stark '579 reference discloses The Stark '579 reference discloses a capacitor device and method for forming a ceramic capacitor incorporating an improved conductive termination arrangement providing a compliant connector for mechanically and electrically connecting the capacitor to a substrate.

The Stark '579 reference does not anticipate the present invention as claimed in Claim 6 because the Stark '579 reference does not show 1) the carrier being a flexible film and 2) by the connection leads not being arranged exposedly on the surface of the substrate.

Instead, as is plainly evident for a person skilled in the art, the Stark '579 reference specifically discloses that, "the substrate 16 has formed therein electrically conductive terminals 14, 15" (Column 3, lines 3 and 4).

The present invention as claimed, in contrast, provides that the connection leads are arranged exposed on the surface of the substrate. Specifically, the Examiner's attention is directed to Figs. 3, 4, and 5 and page 9, third line from the bottom of the disclosure of the present invention, stating that the "top side (of the substrate) is covered with the connection strands 12, 13."

In addition to the chip having connecting surfaces with elevated contact metallizations (so-called "bumps"), it is possible to have the chip connected to the chip carrier in "flip chip

technology" (sf. Page 9 of the originally filed description).

As for the flexibility of the carrier, this respective feature has been originally disclosed on page 10, first paragraph, of the originally filed documents.

In contrast, there is no respective hint in the Stark '579 reference. Instead, the Stark '579 reference aims at providing a compliant connection between the substrate and a capacitor having a ceramic body 10 in order to compensate for the differing thermal coefficients of expansion between the material of the body 10 of the capacitor C and the material of the substrate 16 to which the capacitor is secured (columns 2, lines 24 - 27). This is further supported by the disclosure of the Stark '579 reference on Column 2, lines 32 - 36 where it states:

"Thus, for example, if the substrate 16 expands at a higher rate than the body 10 of the capacitor C and the undue stress is applied at the region of connection between the connector tab and the associated terminal 11' 12', ..." (Column 2, lines 32-36).

Therefore, it is self-evident that the substrate material disclosed in the Stark '579 reference can not be a flexible film and is not supported by the disclosure of the Stark '579 reference.

Applicant further notes that the Stark '579 reference does not provide any suggestion or motivation which would lead a person of ordinary skill in the art to improve on the Stark '579 reference by utilizing a flexible substrate with terminals which are exposedly arranged

on the substrate. Instead, the Stark '579 reference leads a person of ordinary skill in the art to a rigid substrate which is completely different from the present invention as claimed.

Claim Rejection under 35 U.S.C. §103

Claim 7 has been rejected as being obvious over the Stark '579 reference in view of U.S. Patent No. 6,326,233 to Hashimoto (the "Hashimoto '233" reference, hereinafter). The rejection states that the Stark '579 reference does not show the connection strands are connected with the terminals of a coil unit, and relies on the Hashimoto '233 reference to show that this feature would have been obvious.

It is Applicant's position that the claim 7 is not obvious over the Stark '579 reference in view of the Hashimoto '233 reference. The present invention as claimed provides for a combination of features not taught by the prior art as a whole including both the Stark '579 reference and the Hashimoto '233 reference. For instance, there are several differences for the present invention as claimed. As stated above, the connection leads are arranged exposedly on the surface of the substrate to be freely accessible. Further, the Stark '579 reference fails to show that the substrate is flexible. Such differences allow an improved production efficiency as well as a better customizing of the connection leads.

The above two advantages each are due to the combination of features as claimed. The advantages can not be obtained from the prior art. The invention solves the problem of customizing the connection leads during the production stage. The prior art does not recognize these problems and directs the skilled artisan in a different direction. I.e., toward a more

inflexible substrate structure.

The Hashimoto '233 reference also clearly fails to teach and fails to suggest the combination of the invention. Absent a teaching or suggestion of the important feature of the invention, the combined references clearly do not direct the person of ordinary skill in the art toward the combination as claimed.

Claims 18, 24 and 25 have been rejected as being obvious over the Stark '579 reference in view of U.S. Patent No. 5,888,429 to Lovell (the "Lovell '429" reference, hereinafter). It is Applicant's position that the present invention is not anticipated nor made obvious over the Stark '579 reference in view of the Lovell '429 reference. The Lovell '429 reference discloses a temperature adjusting coating and medium and method for providing an electrically resistant temperature adjusting article and structure.

Differing from Lovell, the present invention as claimed provides for the connection leads which are arranged exposedly on the surface of the substrate and freely accessible. The Lovell '429 reference, instead, discloses the strips 2 which does not serve for connection to any device but only serve to connect the coating 5 to the power supply. Since the conductive strips 2 are covered on both sides by flexible substrates 3 and 6 respectively (Fig. 1, column 7, lines 19 - 56), a surface connection of the strips to any electrical device mounted on the substrate would not be possible because of the insulating effect of the substrate.

Claims 20 and 22 have been rejected under 35 U.S.C. §103(a) as being obvious over the Stark '579 reference in view of U.S. Patent No. 5,635,751 to Ikeda et al. (the "Ikeda '751" reference, hereinafter). It is Applicant's position that the present invention is not anticipated

nor made obvious over the Stark '579 reference in view of the Ikeda '751 reference.

Applicant has reviewed the Ikeda '751 reference and Applicant respectfully disagree that the Figs. 6 provide any hint with respect to "dividing the substrate into a plurality of substrates." Instead, Fig. 6 merely shows a through-hole 35 which is more evident from Fig. 5 showing a respective plan view. Thus, according to the Ikeda '751 reference, there is no dividing in the sense of the separating action as well as the U.S. Patent No. 3,691,628 to Kim.

There must be some suggestion or teaching in the prior art as a whole which would lead the person of ordinary skill in the art to provide the combination as claimed. As the prior art as a whole fails to direct the person of ordinary skill in the art toward the claimed combination, the invention should be considered not anticipated, non-obvious and thus patentable.

Claims 20 and 22 have been rejected under 35 U.S.C. §103(a) as being obvious over the Stark '579 reference in view of U.S. Patent No. 6,815,251 to Akram et al. (the "Akram '251" reference, hereinafter). It is Applicant's position that the present invention is not anticipated nor made obvious over the Stark '579 reference in view of the Akram '251 reference.

Applicant has reviewed the Akram '251 reference and also disagrees with the Patent Office's assessment of the Akram '251 reference, stating that the Akram '251 reference shows "dividing the carrier film into a plurality of substrates". In particular, according to the Figs. 7 and 8 of the Akram '251 reference as referred to in the Office Action, that there is no dividing action whatsoever. Instead, the dotted lines in Figs. 3 and 4. Since the subject matter of the Akram '251 reference is a "high density multi-chip module" having a plurality of chips being

arranged on both sides of the substrate, there is no room for any dividing action. Beyond that, interpreting the dotted lines in Figs. 7 and 8 as dividing lines would mean to destroy the chips 12a, 12b, and 14a. Thus, the Akram '251 reference clearly does not suggest the present invention as claimed.

Therefore, Applicant finds that the Stark '579 reference in view of the Akram '251 reference does not anticipate the current invention and there is no suggestion or motivation to use the teachings of the references to provide the combination as claimed.

As the prior art fails to suggest the combination of features as claimed, Applicant respectfully requests that the Examiner favorably consider the claims as now presented, and Applicant respectfully solicits allowance of this application.

It is applicant's position that all claims are now allowable. Should the Examiner determine that issues remain that have not been resolved by this response, the Examiner is requested to contact Applicant's representative at the number listed below.

Favorable action is requested.

Respectfully submitted
for Applicant,

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BY: _____ DATE: May 16, 2005